Organization & Function of Marine Aviation

1a. Differentiate between the functions and operational capabilities of Marine aviation.

Fundamentals

- Marine aviation is divided into six functional areas. Each functional area plays a vital role in the organization of the Aviation Combat Element within the Marine Air/Ground Task Force.
- The primary mission of Marine aviation is to participate as the Fleet Marine Force supporting air component.
- Additionally, Marine aviation supports the seizure and defense of advanced naval bases, conducts essential land operations during naval campaigns and participates as an integral component of naval aviation.

Operational Capabilities

- The ability to project power depends upon the ability to move into and operate within a potential threat area
- Potential threat areas range from heavily built up areas containing established aviation facilities to areas with the crudest facilities

Operational Capabilities

- The operational capabilities of Marine aviation are:
  - Anti-Air Warfare
    - Destroys or reduces enemy air and missile threats
    - Categories
      - » Offensive includes preemptive measures, suppression of enemy air defenses (SEAD) and local air superiority measures
      - » Defensive includes active and passive defensive measures

Operational Capabilities

- Employment methods
  - » Direct employment includes fighter sweeps, surface anti-air warfare, electronic warfare measures, and air search/strike surveillance
  - » Indirect employment includes anti-air warfare operations (cover, concealment, camouflage, deception, dispersion, mobility and protective construction)

Operational Capabilities

- Offensive Air Support
  - Isolates the battlefield and provides timely and accurate close air support and deep air support
  - Categories
    - » Close air support requires detailed integration with a friendly ground force's movement
    - » Deep air support does not require detailed integration but includes air interdiction and armed reconnaissance

Operational Capabilities

- Employment methods
  - » Preplanned missions (scheduled and on-call)
  - » Immediate missions (response time and unanticipated targets)

Operational Capabilities

- Assault Support
  - Ensures the rapid build up of combat power and facilitates the quick maneuver of ground forces
  - Categories
    - » Combat assault transport

      a. Provides mobility and logistical support

      b. Used to effect a rapid force buildup

Operational Capabilities

- Aerial delivery
  - a. Transport equipment and supplies to forward or remote areas
  - b. Includes use of air drops (parachute or freefall)

Operational Capabilities

- Aerial refueling
  - a. Allows flight-ferrying operations
  - b. Aids in the recovery of damaged or low fuel aircraft

Operational Capabilities

- Air evacuation
  - a. Transports personnel and equipment from forward or remote areas
  - b. Includes flights from areas of operations to secure rear areas, medical evacuations and retraction of forces

Operational Capabilities

- Tactical recovery of aircraft and personnel (TRAP)
  - a. Used when tactical situation prevents search and rescue
  - b. Concepts stresses detailed planning, assigned and briefed aircrews and confirmation of survivors and their locations

Operational Capabilities

- Air logistical support
  - a. Only fixed wing aircraft perform air logistical support
  - b. Delivers troops, equipment and supplies to areas beyond helicopter range and lift capability

Operational Capabilities

- Battlefield illumination
  - a. Utilizes fixed or rotary wing aircraft
  - b. Used to illuminate the battlefield

Operational Capabilities

- Employment methods
  - » Rapidly deploy or redeploy combat forces
  - » Rapidly resupply combat forces
  - » Extend range or time on station of aircraft

Operational Capabilities

- Air Reconnaissance
  - Provides the Marine Air/Ground Task Force commander with information he can use to influence operations
  - Categories
    - » Visual

      a. Aids offensive actions such as artillery, naval gunfire or air support missions

      b. Supplements operational information concerning friendly forces

Operational Capabilities

- Multisensor imagery
  - » Photography
  - » Radar
  - » Infrared devices
- Electronic
  - » Detects, identifies, evaluates and locates enemy electromagnetic radiation
  - » Provides an estimate of the enemy's order of battle

Operational Capabilities

- Employment methods
  - » Tactical Air Reconnaissance
    - a. Provides information on terrain, weather and the enemy's size, movement and situation
    - b. Includes artillery, naval gunfire adjustment and observation of ground battle areas, targets or sections of airspace
  - » Strategic Air Reconnaissance
    - a. Provides intelligence information
    - b. Conducted at the national and international level

Operational Capabilities

- Electronic Warfare
  - Neutralizes enemy radars to support Marine Air/Ground Task Force operations and provides information to update the enemy's order of battle
  - Categories
    - » Electronic Warfare Support (ES)
    - » Electronic Attack (ES)
    - » Electronic Protection (EP)

Operational Capabilities

- Employment methods
  - » General support
  - » Direct support

Operational Capabilities

- Control of Aircraft and Missiles
  - Provides the Marine Air/Ground Task Force commander with the ability to use Aviation Combat Element assets to influence combat operations
  - Forms of control
    - » Command
    - » Air direction
    - » Air control
    - » Electromagnetic emissions control

Operational Capabilities

- Control and coordination measures
  - » Fire support coordination measures
  - » Airspace control measures
  - » Air defense control measures

Forward Operating Bases (FOB)

- Airfield Classifications
  - Main Air Base
    - Secure airfield
    - Handles all aircraft types
    - At minimum, includes intermediate maintenance support

Forward Operating Bases (FOB)

- Air Facility
  - Secure airfield
  - Can support aircraft detachments or squadrons
  - Includes organizational maintenance
  - Can stage aviation ordnance

Forward Operating Bases (FOB)

- Air Sites
  - Secure location
  - Combat aircraft preposition to reduce response time
  - Operations limited to receiving and launching previously loaded aircraft
  - Can stage fuel and ordnance
  - No maintenance available

Forward Operating Bases (FOB)

- Air Points
  - Tactical designation applied to a predetermined geographical location
  - Supports a specific tactical mission
  - Includes forward arming and refueling points and lagger points

Forward Operating Bases (FOB)

- Construction Support
  - Forward Operating Base construction support is provided by the following:
    - Engineer Operations Division, Marine Wing Support Squadron, Marine Wing Support Group
    - Engineer Support Battalion, Force Service Support Group
    - Naval Construction Force

Logistical support for the Aviation Combat Element

- Logistical Support for the Aviation Combat Element is included in the Marine Aviation Logistics Support Program (MALSP).
  - Aviation logistics support is resident within the Marine Aviation Logistics Squadron (MALS)
  - Support packages include the following:
    - Fly-in Support Packages (FISP)
    - Contingency Support Packages (CSP)
    - Following-On Support Packages (FOP)

Logistical support for the Aviation Combat Element

- Aviation Ground Support (AGS) and Organic Combat Service Support (CSS)
  - Aviation Ground Support includes air base functions and ground services provided by the Marine Wing Support Squadron

Logistical support for the Aviation Combat Element

- Aviation Ground Support (AGS) consists of the following functionalities:
  - Internal Airfield Communications
  - Weather Service
  - Aircraft Rescue & Fire Fighting
  - Refueling
  - Material Handling
  - Motor Transport

Logistical support for the Aviation Combat Element

- Engineering Support
- Arresting Gear and Visual Landing Aids
- Airfield Security

Logistical support for the Aviation Combat Element

- External Combat Service Support is provided by the Combat Service Support Element of the Marine Air/Ground Task Force
  - Provides support that cannot be provided by the Marine Wing Support Squadron
  - Must be coordinated between the Marine Wing Support Group and the Force Service Support Group

- APPLICATION: Interspersed throughout the entire lesson.
- EVALUATION: Written test at the end of the unit.